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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/751,565

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Masaaki Ueda

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EXAMINER

JOHNSON III, HENRY M

ART UNIT

PAPER NUMBER

3739

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/18/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/751,565	Applicant(s) UEDA ET AL.	
	Examiner Henry M. Johnson, III	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed October 26, 2006 have been fully considered but they are not persuasive. Shimmura et al. is interpreted as reading on the claims as previously cited and as cited herein. The instant application allows for rotation of the support arm around an axis, therefore the position of the ball joint is not fixed. Shimmura et al., likewise, discloses a rotational axis between the moving mechanism and the support arm allowing the ball joint to be positioned above, below or to the side of the instrument holder. Thus, Shimmura et al. is capable of assuming the same relative positions.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "the other end" in line 10. There is insufficient antecedent basis for this limitation in the claim. Further, the other end is associated with both the support arm (line 9) and the supporting mechanism (line 11) making it indefinite.

Claim 4 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 4 is not clear.

Claim 7 recites the limitation "the other end" in line 35. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 39 is not clear.

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Claim 9 recites the limitation "the other end" in line 35. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 39 is not clear.

Claim 10 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 4 is not clear.

Claim 13 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 30 is not clear.

Claim 15 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 30 is not clear.

Claim 16 recites the limitation "the other end" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 5 is not clear.

Claim 20 recites the limitation "the other end" in line 28. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 34 is not clear.

Claim 22 recites the limitation "the other end" in line 28. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 34 is not clear.

Claim 23 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in lines 4-5 is not clear.

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Claim 26 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 24-25 is not clear.

Claim 28 recites the limitation "the other end" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 29 is indefinite as the term "other end" is associated with multiple arms making the structure unclear. The use of the term "provided with the shaft" in line 5 is not clear.

Claim 31 recites the limitation "the other end" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claims 1, 7, 9, 13, 15, 20, 22, 26, 27 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the ball joint is cited as coupling the moving mechanism to the supporting mechanism, yet the supporting mechanism includes a support arm with the ball joint. The ball joint therefore couples the support arm to the medical instrument holder and is not directly coupled to the moving mechanism.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-6, 8, 10-12, 14, 16-19, 21, 23-25, and 27-32 are rejected under 35

U.S.C. 102(b) as being anticipated by

U.S. Patent Application Publication US

2001/0027313 to Shimmura et al.

Shimmura et al. teach a medical

instrument holding apparatus with a

portion for holding an instrument (Fig. 1, #

14), a support arm (Fig. 1, # 11a), a base

support (basal portion, Fig. 1, #s 3 & 4), a

shaft coupled to the basal support (Fig. 1, # 4), the shaft forming part of a parallelogram moving

(moving mechanism) structure (Fig. 1, # 6) with a counterweight (Fig. 1, # 21) to offset the

weight of the support arm (Fig. 1, # 11a) and instrument. Multiple axes of rotation within the

supporting mechanism are disclosed (Fig. 1, #s 0a – 0j). Arm 6a is clearly shorter than arm 6c

of the parallelogram. A ball joint is disclosed that connects the moving portion to an instrument

support portion (Fig. 7, #16h). The support shaft has an axis of rotation (0h) inherently allowing

the ball joint to be above, below or on a horizontal plane with the instrument holding means. As

the angle of inclination within the ball joint changes, so will the position of the center of gravity,

said center of gravity also being dependent on the size and weight distribution of the instrument.

Since the center of gravity of the instrument and support depends on the instrument and the

orientation, the ball joint is clearly capable of being oriented in any relation to the center of

gravity. An operator may grasp any portion of the support and instrument elements.

Electromagnetic locks as means for braking their respective movable sections are disclosed

(Fig. 1, #s 16a-16f), with an activating switch on the holding portion (paragraph 0059). A

braking means is also disclosed for the ball joint (paragraph 0092). The instrument holding

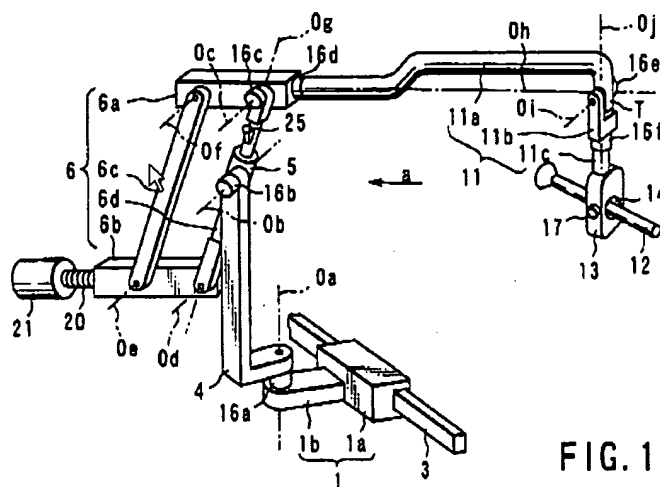


FIG. 1

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portion is interpreted is capable of being held by an operator and is coupled to the support arm by rotatable joints (Fig. 1, #s 16e & 16f). The upper portion of the parallelogram is shorter than the lower portion with the counterweight and either of the side arms. The counterweight is adjustable via screw threads (Fig. 1, # 20).

The apparatus of Shimmura et al. implicitly has centers of gravity, centers of inclination and forces exerted within the device based on the weights of the instrument and counterweights. Relative positions of apparatus components will vary as the instrument is positioned and can assume limitless configurations. The apparatus is therefore interpreted as capable of the position(s) cited.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication US 2001/0027313 to Shimmura et al. Shimmura et al. are

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discussed above and disclose an endoscope as the medical instrument, but do not specifically teach an optical or imaging system. A skilled artisan knows that endoscopes typically include multiple lumens for instruments and observation during an endoscopic procedure. It would have been obvious to one skilled in the art to include optics and imaging in the instrument as it is common and well known to do so.

Allowable Subject Matter

Claims 7, 9, 13, 15, 20, 22 and 26 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M. Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Henry M. Johnson, III
Primary Examiner
Art Unit 3739